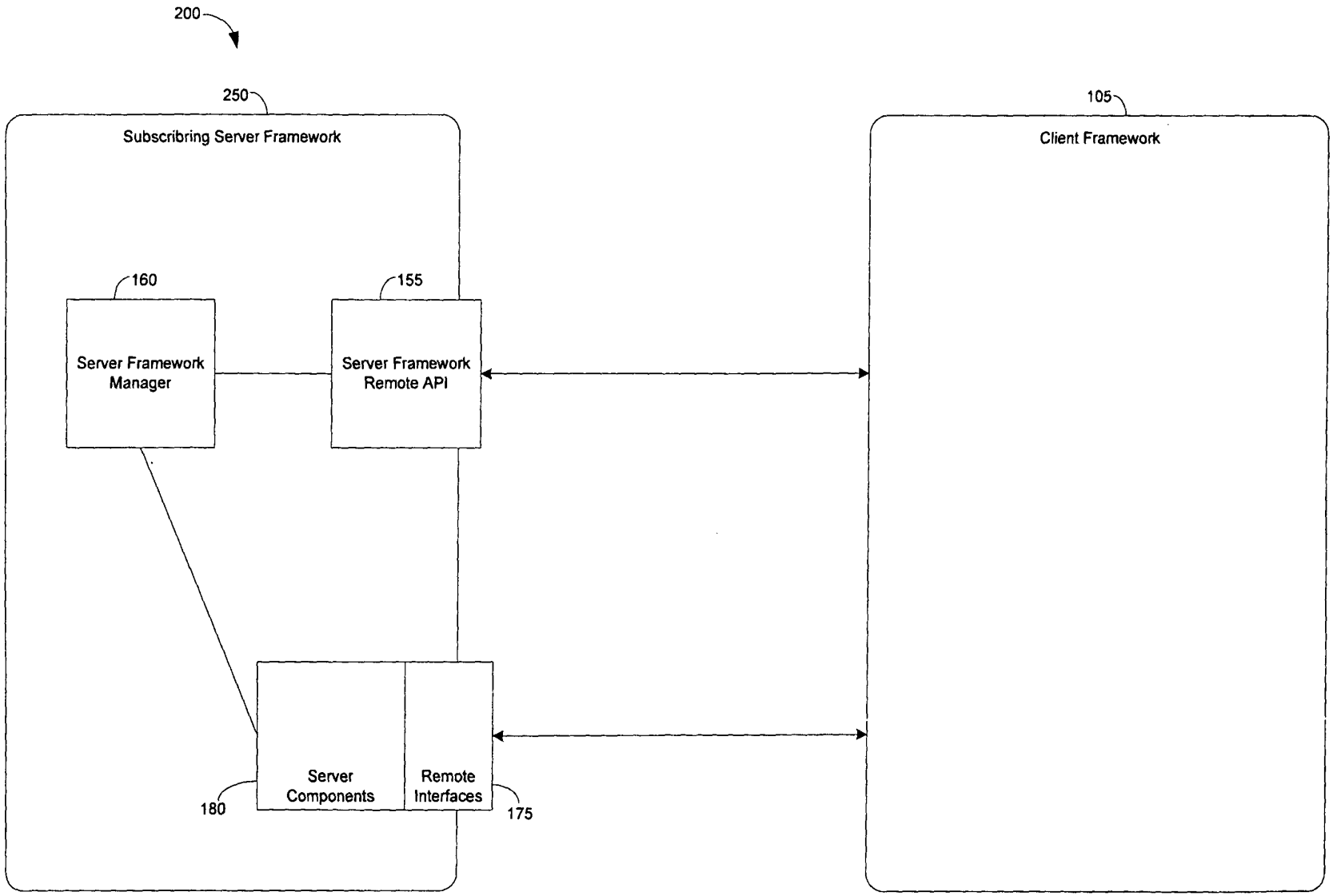
200
250
Subscribring Server Framework
105
Client Framework
160
Server Framework Manager
155
Server Framework Remote API
Server Components
Remote Interfaces
180
175

FIGURE 1

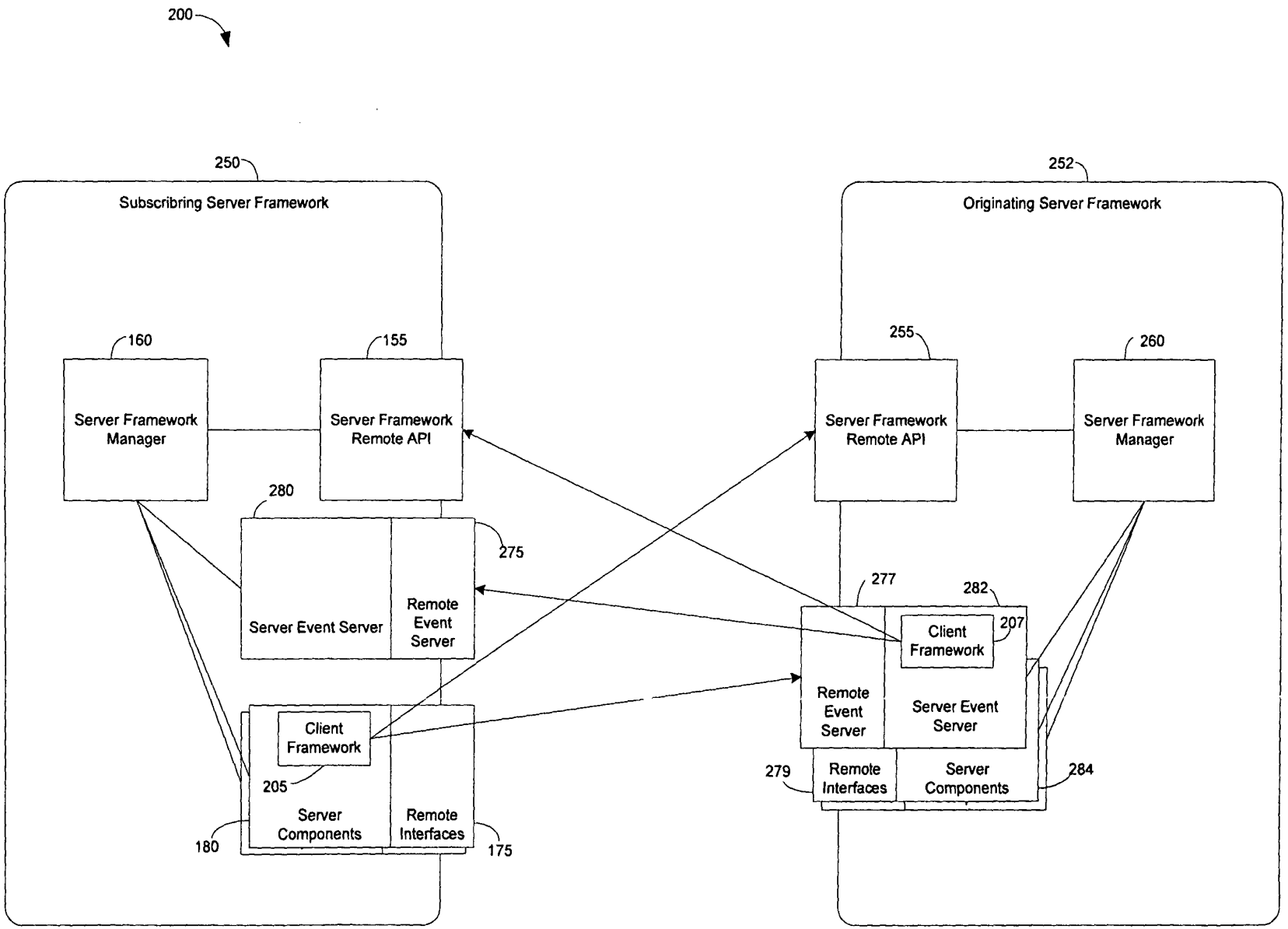
200
250
Subscribing Server Framework
252
Originating Server Framework
160
Server Framework Manager
155
Server Framework Remote API
255
Server Framework Remote API
260
Server Framework Manager
280
275
Server Event Server
Remote Event Server
277
282
207
Client Framework
Remote Event Server
Server Event Server
Client Framework
205
Server Components
Remote Interfaces
180
175
279
Remote Interfaces
Server Components
284

FIGURE 2

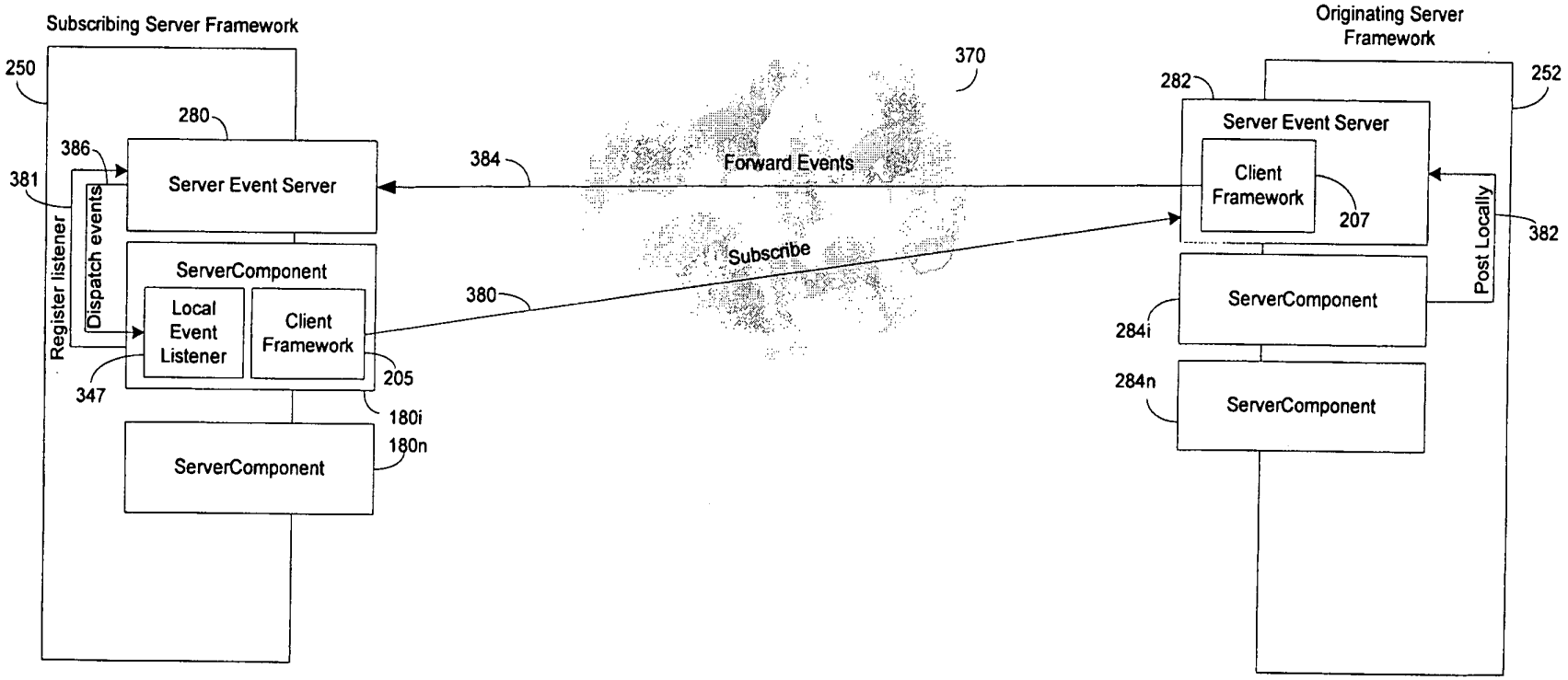
Subscribing Server Framework
250
280
386
381
Server Event Server
Dispatch events
Register listener
ServerComponent
Local Event Listener
Client Framework
347
205
180i
180n
ServerComponent
384
Forward Events
370
380
Subscribe
Originating Server Framework
252
282
Server Event Server
Client Framework
207
382
Post Locally
ServerComponent
284i
284n
ServerComponent

FIGURE 3

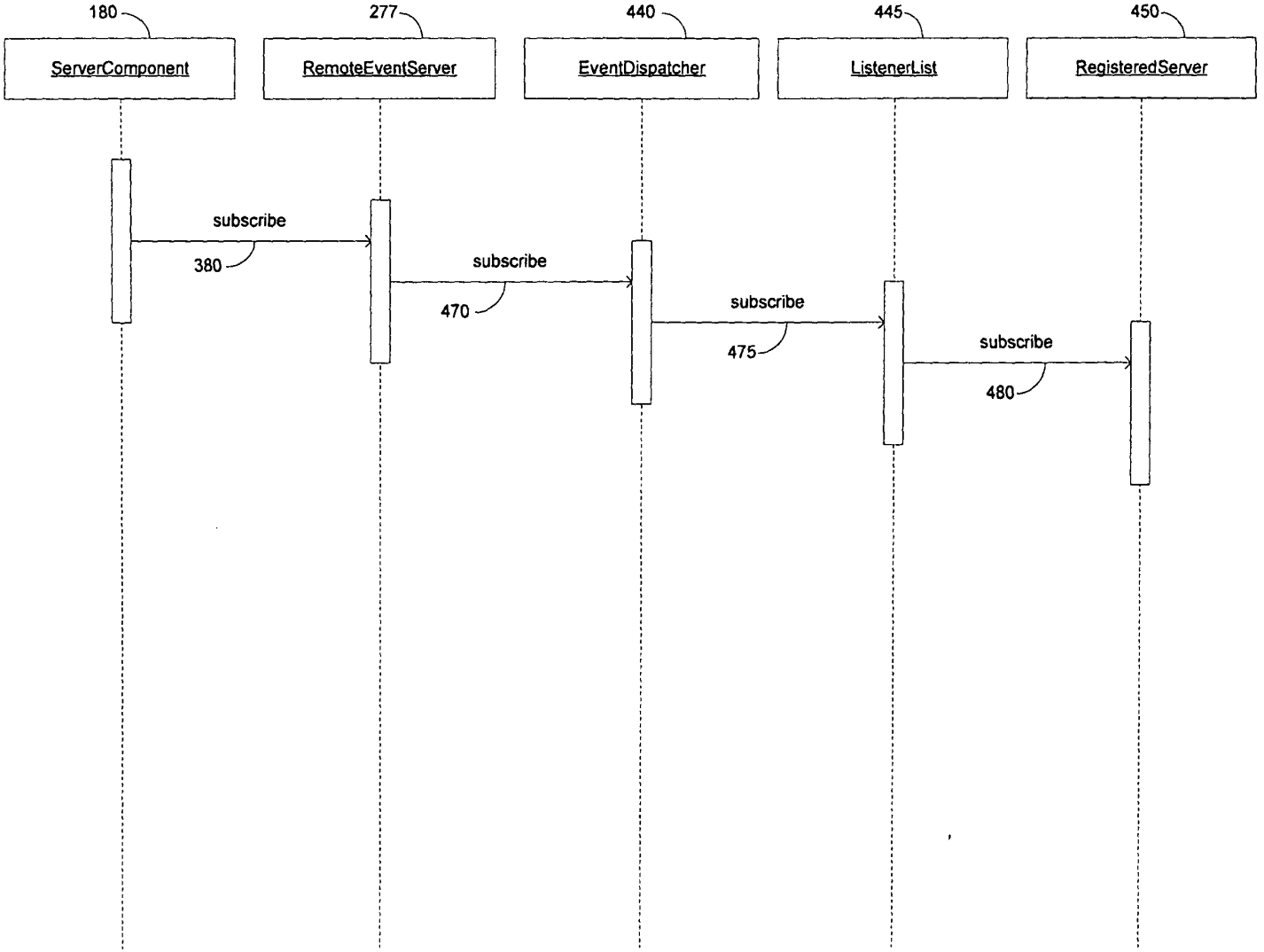
180
277
440
445
450
ServerComponent
RemoteEventServer
EventDispatcher
ListenerList
RegisteredServer
subscribe
380
subscribe
470
subscribe
475
subscribe
480

FIGURE 4

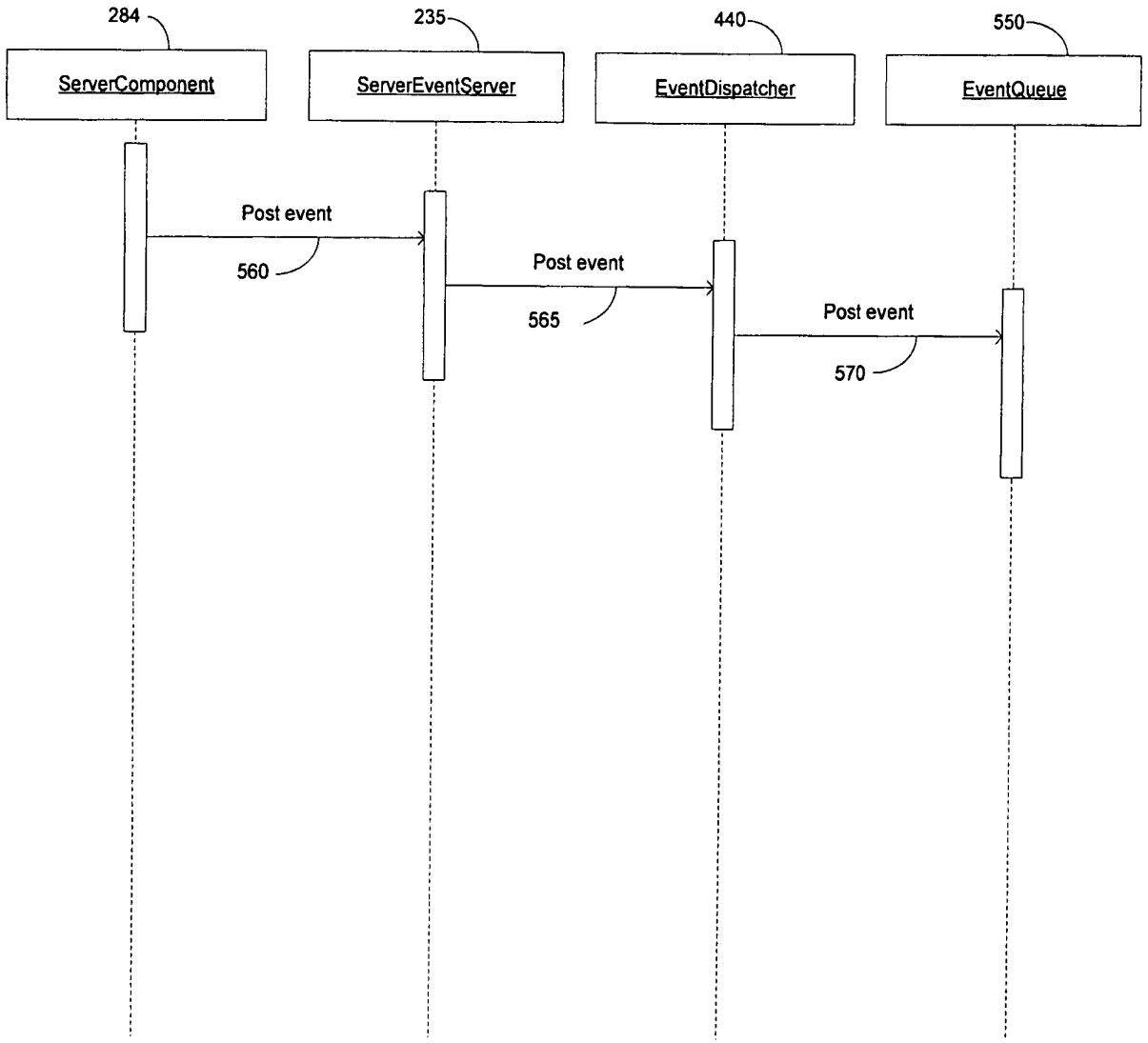
284
235
440
550
ServerComponent
ServerEventServer
EventDispatcher
EventQueue
Post event
560
Post event
565
Post event
570

FIGURE 5

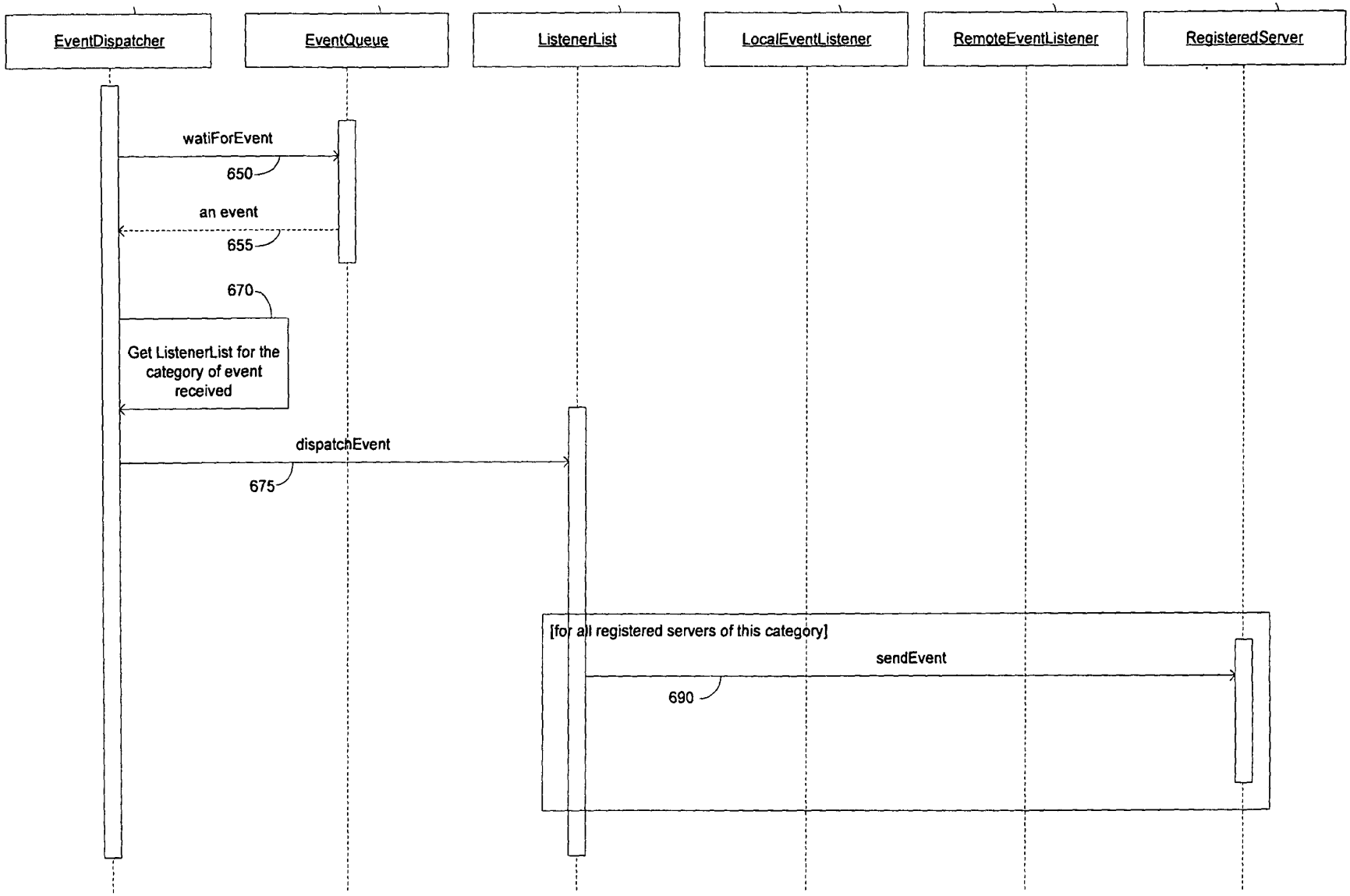
EventDispatcher
EventQueue
ListenerList
LocalEventListener
RemoteEventListener
RegisteredServer
watiForEvent
650
an event
655
670
Get ListenerList for the category of event received
dispatchEvent
675
[for all registered servers of this category]
sendEvent
690

FIGURE 6

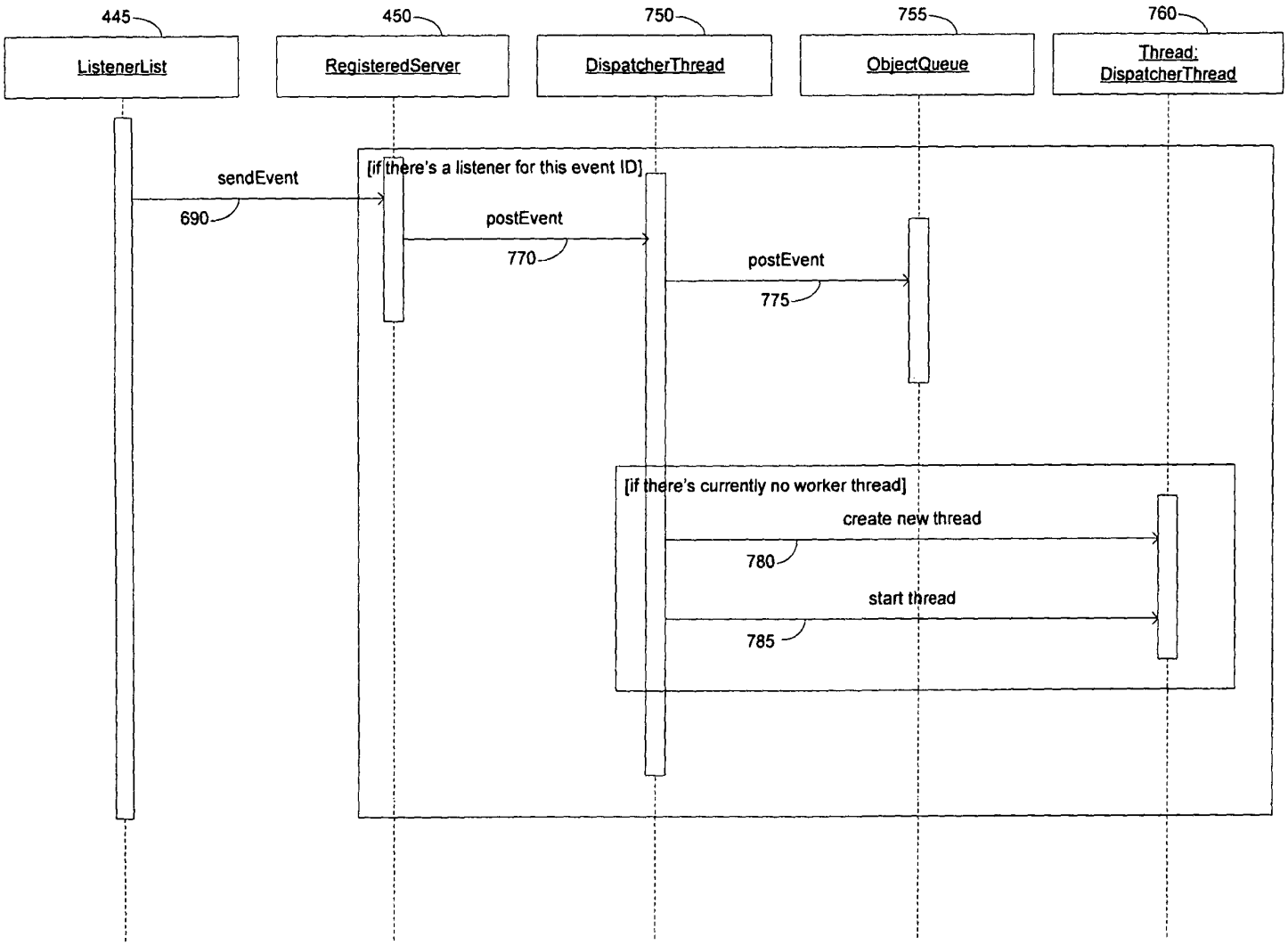
445
ListenerList
450
RegisteredServer
750
DispatcherThread
755
ObjectQueue
760
Thread:
DispatcherThread
[if there's a listener for this event ID]
sendEvent
690
postEvent
770
postEvent
775
[if there's currently no worker thread]
create new thread
780
start thread
785

FIGURE 7

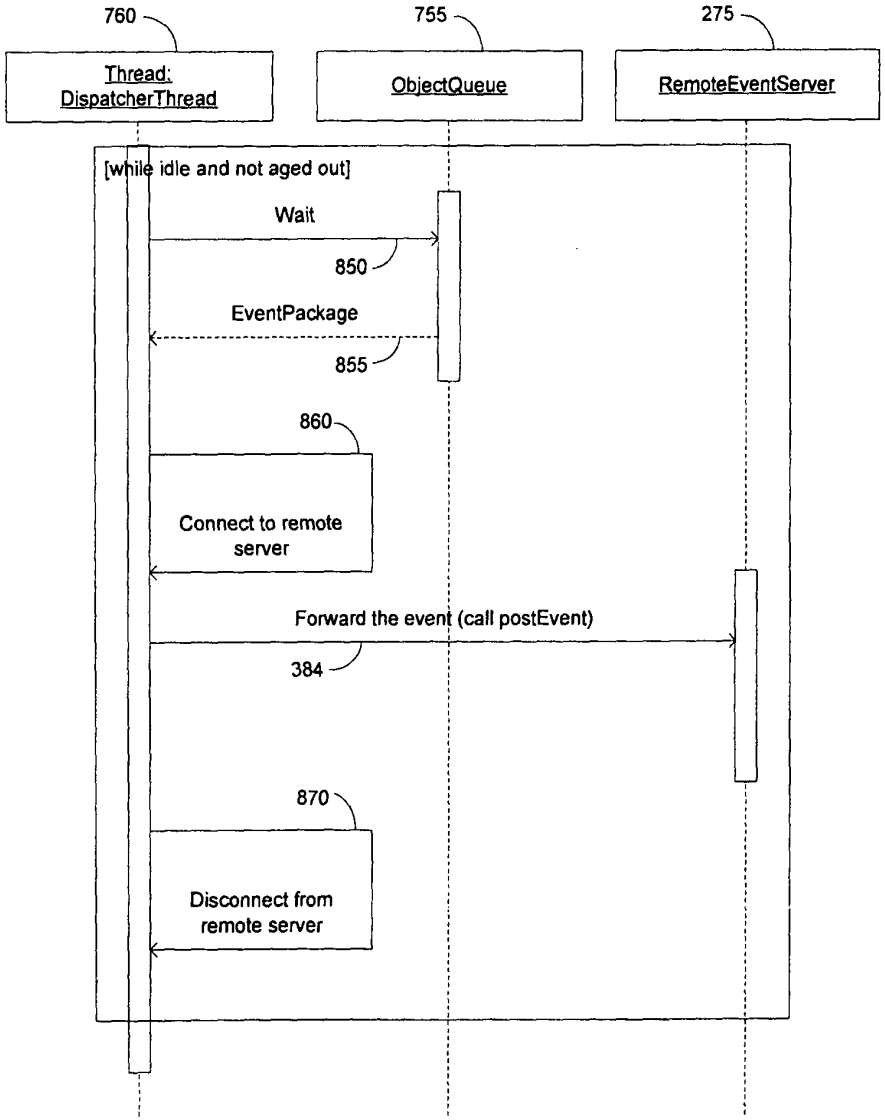
760
755
275
Thread:
DispatcherThread
ObjectQueue
RemoteEventServer
[while idle and not aged out]
Wait
850
EventPackage
855
860
Connect to remote
server
Forward the event (call postEvent)
384
870
Disconnect from
remote server

FIGURE 8

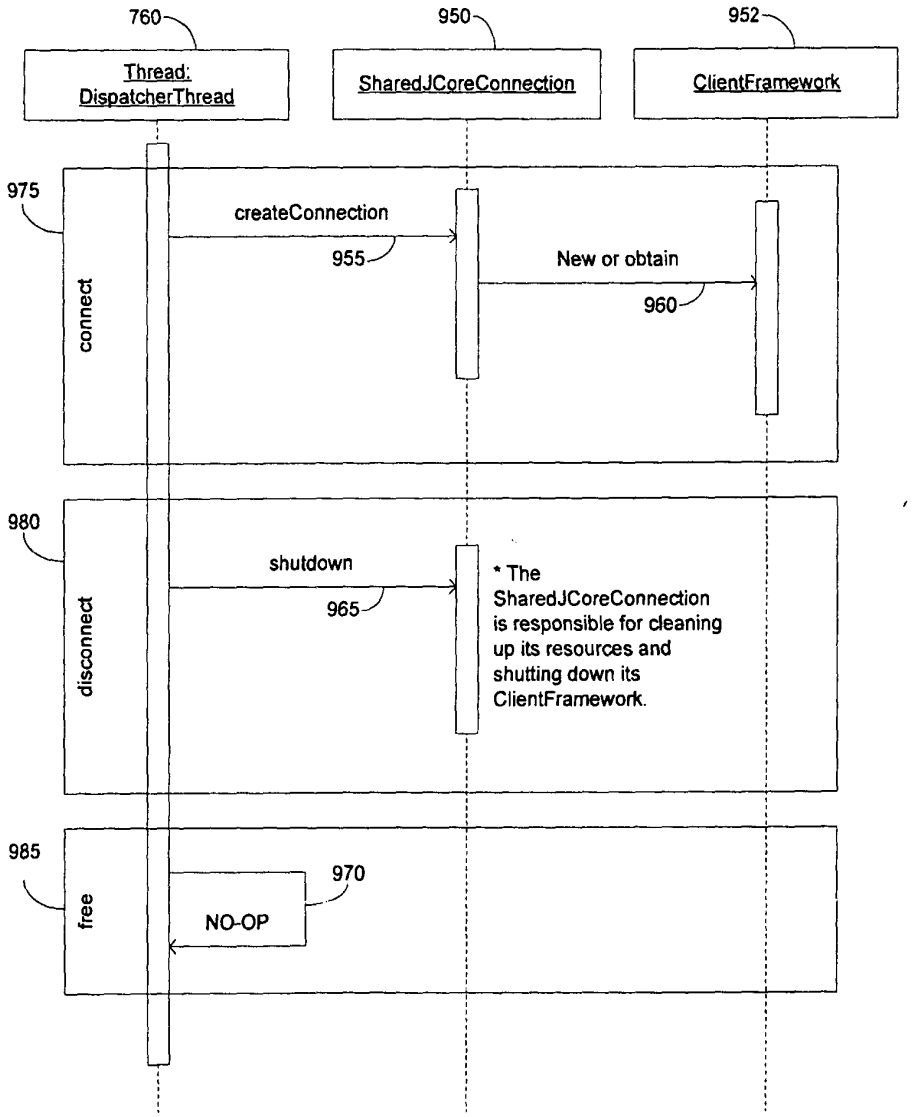
760
Thread:
DispatcherThread
950
SharedJCoreConnection
952
ClientFramework
975
connect
createConnection
955
New or obtain
960
980
disconnect
shutdown
965
* The
SharedJCoreConnection
is responsible for cleaning
up its resources and
shutting down its
ClientFramework.
985
free
970
NO-OP

FIGURE 9

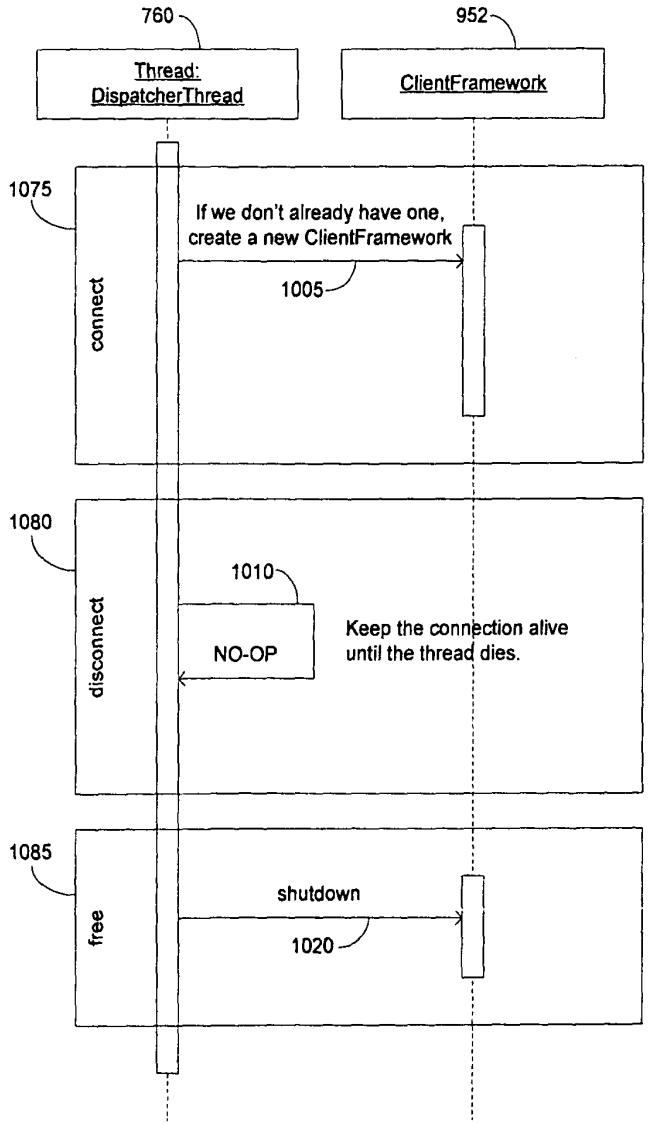
760
952
Thread:
DispatcherThread
ClientFramework
1075
connect
If we don't already have one,
create a new ClientFramework
1005
1080
disconnect
1010
NO-OP
Keep the connection alive
until the thread dies.
1085
free
shutdown
1020

FIGURE 10

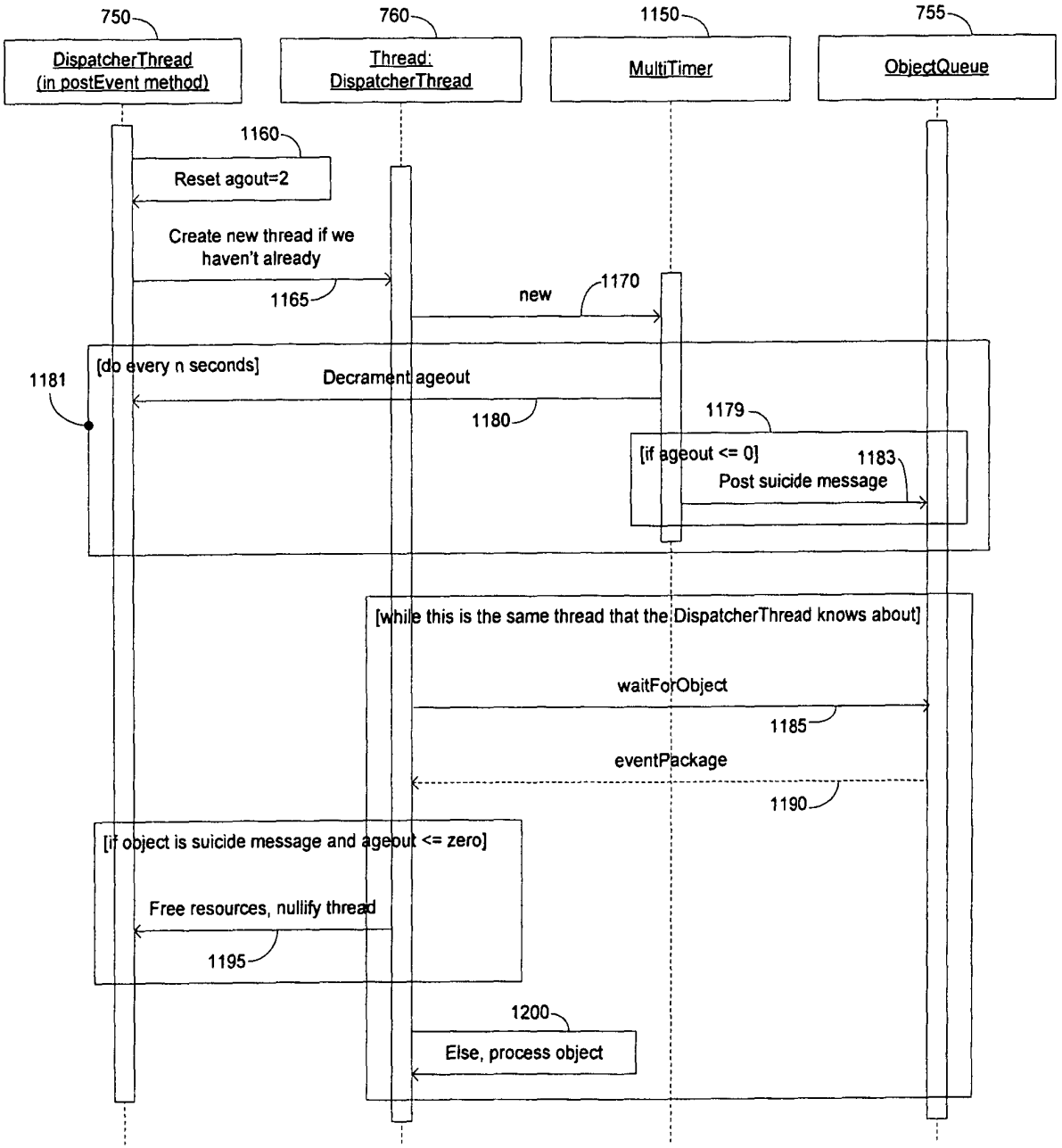
750
DispatcherThread
(in postEvent method)
760
Thread:
DispatcherThread
1150
MultiTimer
755
ObjectQueue
1160
Reset agout=2
Create new thread if we
haven't already
1165
new
1170
[do every n seconds]
1181
Decrament ageout
1180
1179
[if ageout <= 0]
1183
Post suicide message
[while this is the same thread that the DispatcherThread knows about]
waitForObject
1185
eventPackage
1190
[if object is suicide message and ageout <= zero]
Free resources, nullify thread
1195
1200
Else, process object

FIGURE 11